

REMARKS

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

The present invention as set forth in **amended Claim 1** relates to a toner for developing an electrostatic image, comprising:

a polyester resin containing nitrogen; and

a colorant,

wherein a concentration of nitrogen at a surface of the toner is more than a concentration of nitrogen in the entire toner, and the surface of the toner is harder than a center portion of the toner.

In contrast, none of the cited references discloses or suggests the toner of the present invention comprising **a polyester resin containing nitrogen, wherein a concentration of nitrogen at a surface of the toner is more than a concentration of nitrogen in the entire toner, and the surface of the toner is harder than a center portion of the toner.**

Claim 1 was amended to include the limitations of Claims 7 and 8. In addition Claims 15-21 claim a polyester resin containing nitrogen. As acknowledged by the Examiner in the Interview Summary of January 4, 2005, these amendments overcome the rejections over Nakayama set forth in paragraphs 12-17 of the Office Action of September 9, 2004.

Further, the examiner asserts at page 19 of the Office Action of September 9, 2004, that the toner disclosed by Sugiyama appears to be obtained by a method that is similar to the method used to obtain a toner having the properties recited in the instant claims 1-6, 8 and 9. Applicants disagree.

Sugiyama (U.S. 2002/0081510 A1) fails to disclose or suggest the toner of the present invention **wherein a concentration of nitrogen at a surface of the toner is more than a**

concentration of nitrogen in the entire toner, and the surface of the toner is harder than a center portion of the toner.

In Example 1 of the present specification, the toner was matured at 45°C for 7 hours to obtain dispersion slurry 1 after reacting and removing the solvent (see the specification, page 83, lines 1-5). As mentioned in the specification at page 48, lines 10-17, in the present invention it is preferred that the reaction be matured after the reactants are mixed and the solvent is removed **to allow nitrogen concentration to be higher at the surface than the entire toner particle** (see the specification, page 48, lines 10-17).

On the other hand, Example 14 of Sugiyama, does not have such maturing step after reacting and removing the solvent (see Sugiyama, [0171]). Sugiyama simply states about the reaction and solvent removal step that the resulting dispersion was placed in a flask equipped with a stirrer and a thermometer and heated to 98°C to remove the solvent while reacting prepolymer (2) with ketimine (1).

Accordingly, the toner of the present invention cannot be obtained by the process disclosed in Sugiyama.

Nukada fail to cure the defects of Sugiyama. Thus, even a combination of Nukada and Sugiyama does not result in the present invention.

New Claim 22 has been added to claim the toner according to Claim 11, wherein said particles are obtained by reacting a dispersion of an organic solvent in which a prepolymer (A) having isocyanate groups is dissolved or dispersed with amines (B) in an aqueous phase, and **allowing the reaction to mature after the reactants are mixed and the solvent is removed.**

Therefore, the rejection of Claims 5 and 6 under 35 U.S.C. § 102(b) as anticipated by Nakayama (US 5,624,779), the rejection of Claims 1-4, 11, 15, 17 and 18 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over

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Nakayama (US 5,624,779), the rejection of Claim 12 under 35 U.S.C. § 103(a) over Nakayama combined with Okado (U.S. 6,077,635), the rejection of Claim 13 under 35 U.S.C. § 103(a) over Nakayama combined with Hayase (U.S. 5,753,399) and Waki (U.S. 5,797,070), the rejection of Claim 14 under 35 U.S.C. § 103(a) over Nakayama (U.S. 5,624,779) combined with Ishiyama (U.S. 6,080,519) and Kawase (U.S. 5,547,802) and the rejection of Claims 13-19 under 35 U.S.C. § 103(a) as being unpatentable over Nukada (U.S. 2003/00118366 A1) combined with Nakayama and the rejection of Claims 1-15 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Sugiyama (U.S. 2002/0081510 A1) and the rejection of Claims 16-19 under 35 U.S.C. § 103(a) as being unpatentable over Nukada combined with Sugiyama are believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of these rejections is respectfully requested.

The rejection of Claims 11, 13, 16 and 19 under 35 U.S.C. § 112, 2nd paragraph, is obviated by the amendment of these Claims.

The objection to the drawings is obviated by the amendment of Figure 6. Reference numbers 65-69, 71-73, 75-80 and 170 have been deleted from this Figure.

The objection to the disclosure is obviated by the amendment of the disclosure. The trademarks pointed out by the Examiner have been capitalized.

In addition, “L²” and “P²” have been used in the equations defining SF-1 and SF-2. “L²” and “P²” are the correct variables as shown in U.S. 5,797,070 and U.S. 5,753,399 which were cited by the Examiner (see page 4 of the Office Action of September 9, 2004). Thus, the amendment of the definitions of SF-1 and SF-2 only corrects obvious typographical errors.

The polyester resin of the independent Claims has been amended to contain nitrogen as supported at page 25 of the specification.

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As requested by the Examiner, the List of Related Cases filed December 22, 2003, was refiled including copies of the pertinent portions of the listed copending applications on December 8, 2004. The Examiner is requested to consider the List of Related Cases.


This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

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